(II, 185); *Lophocolea Austini* is now included under *L. heterophylla* (IV, 37); *Lophozia gracilis* is now *L. attenuata* (VI, 187); *L. Lyoni* is now *L. quinquedentata* [1]; *Nardia haematosticta* is now *N. Geoscyphus* (V, 57).

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PHILOLOGICAL ASPECTS OF THE "PLANTS OF WINELAND THE GOOD."

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A CONSIDERABLE time has elapsed since the appearance of Professor Fernald's preliminary study upon the Norse discovery of America,[2] but as the author's promised greater work upon the subject is not yet forthcoming the publication of the following considerations may not be without interest to those who have read his article.

It may be said at the outset that all attempts to find the Vínland of the Norsemen in New England have been unsuccessful. The evidence for Nova Scotia seemed relatively stronger, nor would the conclusions of Fernald's preliminary study, even if accepted in all their details, preclude the possibility of the Norsemen having come as far south as Nova Scotia, though the author seems unwilling to believe that they did.

Of the many works devoted in whole or in part to the Norse discovery of our continent the one possessing value beyond all others is that of the Norwegian historian, Gustav Storm, published in 1887,[3] who after a critical survey of all available material concluded that the Norsemen came as far south in America as Nova Scotia, but hardly further. Reeves, whose book [4] forms the basis of Fernald's study, was a young American scholar of promise who met with an untimely

[1] The reasons for this change have not yet been discussed in the writer's Notes.

[2] RHODORA, xii, 17ff. 1910.

[3] Aarbøger for nordisk Oldkyndighed og Historie, 2 Række, ii, 293ff.; the paper is also accessible in English in Mémoires de la Société Royale des Antiquaires du Nord viii, 307ff. 1888. For the bibliography of the Norse discovery of America see H. Hermannsson, Islandica, ii (Ithaca, N. Y.). 1909.

[4] The Finding of Wineland the Good. London. 1890.

death not long after the publication of his book. The book is of value as furnishing a phototypic reproduction of the saga-texts forming the most extensive sources of information as to the Norse voyages to America, enabling one then to form an independent judgment in critical questions of textual reading without a special trip to Copenhagen. Further than this very considerable service it represents no noteworthy contribution to the problem, though including many of Storm's results and offering generally a good means of orientation.[1]

The first serious assault upon Storm's results is that of Fernald, who confines himself for the present to the botanical field where his success may well lead one to suspect that Storm's position is less impregnable than had been supposed. Storm's botanical conclusions were that the wild grape may have been found by the Norsemen as far north as Nova Scotia, while he accepted Schübeler's hypothesis[2] that the "self-sown wheat" of the Norsemen was the wild rice (*Zizania*) of eastern America. Fernald after reviewing the facts, present and historical, about the northeastern distribution of the American species of wild grapes doubts that the Norsemen could have found them in Nova Scotia, and certainly no one familiar with Fernald's knowledge of the distribution of our northeastern plants and his familiarity with their literature would question the weight of his contentions. From the lack of similarity either in appearance or habitat he doubts that the Norsemen could have called our wild rice wheat, a doubt one cannot but subscribe to, and he notes further that wild rice does not occur in Nova Scotia anyhow. From this last fact there seems no escape. In so far Fernald has certainly made a real contribution. But he does not stop with this; much of positive conclusion he offers as a substitute for what he has demolished. The Norse *vínber* did not mean grapes at all, but only wild currants (*Ribes* spp.), or perhaps mountain-cranberries (*Vaccinium Vitis-Idaea*), their "self-sown wheat" was a species of grass (*Elymus arenarius*) more closely resembling wheat, while a wood referred to by the Norsemen as *mǫsurr* was the white birch. These conclusions called by the author "reasonably certain" are by no means invulnerable to criticism. Fernald's reference to the unquestionable Swedish *vinbär* = currant and to a similar terminology elsewhere among the northern European peoples as well

[1] Cf. the review of Gering, Zeitschrift für deutsche Philologie, xxiv, 84ff. 1892.

[2] Schübeler was not the first to whom this idea had suggested itself, as will be noted further on.

as to the wide-spread practice of preparing a beverage from the fruit of this plant is not without interest, but neither the name nor the practice, for either of which Fernald's earliest literary testimony is from the close of the 16th century, has any necessary application to the time or place of the literary monuments commemorating the Norse discovery of America. Fernald reasons as a botanist: if the most learned botanists of the end of the 16th and beginning of the 17th centuries confused the currant or the mountain-cranberry with the southern European grape, one could not expect that they were distinguished by anyone in northern Europe at an earlier period. That linguistic usage bears abundant testimony to the association (if not confusion) of the 3 kinds of plants with one another is an indubitable fact. But Fernald's attitude towards the facts of linguistic history seems unconsciously to coincide with that of a bygone school of philologists who regarded languages as undergoing a constant process of deterioration: i. e., he looks upon everything found in a relatively modern period as a survival from a more general condition of things in a linguistically richer past. As a matter of fact the development is more complex and the beginning must be considered as well as the end. The word *wine* and all its northern European kin are loan-words directly or indirectly from the Latin *vinum* (Vulgar Latin also *vinus*), the word with the things for which it stands becoming known to the Germanic peoples from about the beginning of the Christian era, to the most northerly ones of course relatively later.[1] That as a loan-word it first applied to the foreign grape and its products is incontestable. The earliest record we have of the combination wine-berry is in the Gothic of the Bible-translation accredited to Bishop Ulfilas (Wulfila) of the 4th century, the oldest manuscripts of which date from the 5th and 6th centuries. It occurs here as *weinabasi* (Mat. vii, 16; Lu. vi, 44) translating the Greek σταφυλή. In the related Old Germanic languages it was also found: in Old Saxon and Old High German *wînberi*, Old English *wínberie* (*berige*), Old Norse *vínber*, everywhere with the meaning grape, a meaning preserved in present German *Weinbeere* and generally in the Scandinavian languages. The transfer of the word to currant has become thoroughly established only in modern Swedish,

[1] Cf. Walde, Lateinisches etymologisches Wörterbuch, 2nd ed., 839. 1910; Falk & Torp, Norwegisch-dänisches etymologisches Wörterbuch, 1381. 1911; Kluge, Etymologisches Wörterbuch der deutschen Sprache, 7th ed., 487. 1910; Hoops, Waldbäume und Kulturpflanzen im germanischen Altertum, 558ff. 1905; with the literature there cited.

in that such use of it in Norwegian or English is more or less local, *vinbær* in Danish-Norwegian still meaning regularly grape. In modern Icelandic *vínber* means grape, as it did also in Old Icelandic in all cases of its use preserved to us. In view of these facts the use of the fermented juice of the currant in lieu of wine should not constitute an argument of great weight, but it may be said that we are tolerably well informed as to the details of life in Iceland in the saga-period (as we are for that matter of the Icelandic vocabulary) and that the fermented drinks of those troublous times were of an entirely different nature.[1] Wine was of course known, but is usually spoken of as an expensive article of import, a luxury of gods, kings and the very wealthy. For the substitute use of the fermented juices of native berries there is not much evidence, nor would one be inclined to suppose that such a beverage, if actually made, would have been dignified with the name of *vín*. Still it may be of passing interest to note that the saga of Bishop Páll [2] does speak of such wine made of crow-berries (*Empetrum nigrum*) but the making of it came as a new suggestion brought by Bishop Jón who had just arrived from Greenland, the latter having received the suggestion from the Norwegian king Sverrir. There is a corresponding entry in the Icelandic annals under date of 1203 [3] that berry-wine was made that year for the first time in Iceland. The fact is also referred to in Finnur Jónsson's Ecclesiastical History of Iceland,[4] the author being disinclined to believe that such wine was used for communion purposes (the circumstances connected with the report might well suggest that it was hit upon as a means of providing a substitute for communion-wine, which must have been expensive or often difficult to get at all in Iceland and even more so in Greenland) and stating that he knew a man of his own time who had made the same experiment with a degree of success, though the product was not of remarkable quality. The earliest reference to the vines from which *Vínland* took its name is of course Adam of Bremen's Latin *vitis*. If Fernald had simply argued that the Norsemen were not competent to know exactly what a grape was and might conceivably have taken something else for it,

[1] Cf. Weinhold, Altnordisches Leben, 151ff. 1856; Kålund in Paul, Grundriss der germanischen Philologie, iii², 448.

[3] Biskupa sögur, i, 135.

[4] Islenzkir Annálar, 84.

[5] Finni Johannaei Historia ecclesiastica Islandiae. Tom. i, 305, note b. Havniae, 1772. Cf. Olafsen & Povelsen, Reise igiennem Island, i, 171 f. 1772 (Reise durch Island. i, 92. 1774).

it could readily be granted. What the sagas say of the Vínland grapes leaves no doubt upon this point, in fact the relatively less credible one has felt obliged to introduce a southern European with the suggestive name of Tyrkir as a person competent to identify grapes. One might for example conceive of them as finding a wild plum or cherry (*Prunus* sp.) which would at least account for their loading up their boats with the wood of the grape. There is, so far as I can see, absolutely nothing gained by Fernald's attempt to find a new interpretation for the plant giving its name to the country. Such arguments as that a Scandinavian *vindrufva* (= grape) render it unlikely that the Norsemen would have called grapes *vínber* merely show upon what unfamiliar ground Professor Fernald is treading, as, if one choose to neglect the occurrence side by side of the corresponding *Weinbeere* and *Weintraube* in modern German, *vindrufva* is only a late Swedish word (it occurs also in Danish as *vindrue* = grape), the latter part of which (or for that matter the whole combination) is borrowed from the Low German, as the form of the word sufficiently shows.[1] One of Fernald's numerous footnotes (6 on page 21) leaves one similarly puzzled both as to meaning and application until one consults the reference to DeCandolle and finds it taken over intact, apparently without an exact understanding of its content. *Ribs* and *resp* are simply two of the distortions of the mediaeval Latin *ribes* found in recent Scandinavian (perhaps brought in with a cultivated strain of the plants) and not at all old Scandinavian words.[2] It is peculiar that the wild currants of northern Europe seem to have had no common Old Germanic or even common Scandinavian name.[3] For the interesting facts about the bringing of the plant-name *ribes* to Europe by the Arabs see Fischer-Benzon, Botanisches Centralblatt, lxiv, 371ff., 401ff. 1895. Fernald has himself been unable to find any evidence that the mountain-cranberry has ever been called *vínber* in any part of Scandinavia.

The conclusion that the "self-sown wheat" found was the Lyme-grass (*Elymus arenarius*) may readily seem more plausible than that it was the wild rice, but even then it is difficult to see why the Norsemen should have noted as remarkable the occurrence of a plant with which they were entirely familiar at home and why they should

[1] Cf. for example Falk & Torp, loc. cit., 158.
[2] Cf. Falk & Torp, loc. cit., 896.
[3] Cf. Hoops, Reallexikon der germanischen Altertumskunde, i, 204. 1912.

characterize it as self-sown (which surely implies a contrast with the sown wheat), if it was a plant they knew solely in the wild state. Nor has Fernald shown that the plant in question has ever been called *hveiti:* the terms "wild wheat," "wheat-grass," and "strand-wheat" which he brings as argument involve a comparison with wheat, not an identification with it, and none of them are Icelandic, the plant being known in Iceland as *melr* as Fernald notes. *Hveiti* meant in Old as it does in Modern Icelandic wheat. Fernald's note that this identification of the "self-sown wheat" with *Elymus arenarius* had already been published by Peter (Pehr) Kalm in 1764 is of decided interest, but does not prove its correctness. It may be of interest to note a prior publication of the same identification, viz. in a dissertation of G. A. Westman defended by its author in Åbo in 1757, during the rectorship of Kalm himself the dissertation being evidently largely inspired by the latter's American trip.[1] The author's refutation of the idea that the wheat of the Norsemen was *Zizania* is not dissimilar to Fernald's, Westman maintaining that this last plant resembled oats more than it did wheat and that it did not grow in fields, but actually in the water (pp. 16ff.). Kalm's idea also found expression in the article of Wormskiold to be referred to later.

As to the wood called *mǫsurr* Fernald may be entirely right in thinking it to be birch, or for that matter the white birch. The idea that it was maple, which Fernald combats, is however not one that has been generally held, but was evidently found in Reeves' book (Reeves, p. 170, does not commit himself however and states himself that the word had already been connected with Swedish masbjörk, etc), whence it may be followed back to Rafn[2] and is by him accredited to Wormskiold.[3] This identification also goes back ultimately to Kalm's American trip, the wood being discussed very sensibly by Westman in the dissertation just referred to (pp. 12ff.), who suggested that it might be the form of *Acer rubrum* seen by Kalm in Canada. If Fernald had based his researches upon Storm's work, he would have noted that the latter made no attempt to identify the tree, doubtless because he understood the word. The present Swedish *masur* and German *Maser* leave no doubt as to the meaning of the identical Old Norsę word *mǫsurr*. It means everywhere wood with a spotted or

[1] Westman, Itinera priscorum Scandianorum in Americam. Aboae. 1757.
[2] Antiquitates americanae, 441f. 1837.
[3] Det skandinaviske Litteraturselskabs Skrifter, xiii, 400ff, 1814.

mottled grain, the word being closely related to the German *Masern* (= measles) and the English *measles*."[1] It does not refer to any definite species or genus of trees. The "bird's eye maple" furnished the ground for the hypothesis that it was a species of maple the Norsemen referred to and credit is due Fernald for emphasizing a more probable identity with the white birch, but the fact must be borne in mind that the word permits no such certain identification as to contribute in any way to the determination of the point on the American coast reached by the Norsemen, but on the contrary the identity of the tree furnishing the *mqsurr* might depend upon the latitude in which it was found.

The fundamental problem, that of the value of the sources, Professor Fernald has naturally left untouched. The Old Icelandic sagas exist in all degrees of historical trustworthiness from that of very reliable contemporary or slightly later biography or history to the wildest fiction. In point of subject-matter, style and historical reliability they admit of classification into a number of groups. Most reliable generally are the *Konunga sqgur* or sagas of the (mostly Norwegian) kings, with which a few other historical works dealing with Iceland, etc. may be included. The authors of these are in many cases known. The *Íslendinga sqgur*, to which the most considerable sources for the Norse discovery of America belong, differ among other things in being all of unknown authorship. They were written mostly in the 13th century and show stylistically the characteristics of literary rather than primarily historical work.[2] They deal for the most part with Icelandic (in our case Greenlandic) personages of the 9th and 10th centuries: i. e. two to three centuries intervene between the events and the written record, or rather elaboration of them. The materials that the authors had to use were mostly oral traditions two or three hundred years old. That these literarily remarkable productions are not of the nature of historical documents must be clear enough from the nature of the case. In this particular instance a check upon their reliability is offered in the fact that two such records of the oral tradition of the Norse discovery of America are preserved: the so-called *Eiríks saga rauða* and the *Grœnlendinga þáttr*. Under the circumstances only the features in which both agree could be

[1] The word is entirely correctly explained by Westman. Cf. also Grönlands historiske Mindesmærker, i, 279 f. 1838.

[2] Cf. e. g. Neckel in Mitteilungen der schlesischen Gesellschaft für Volkskunde, xi, 38ff. 1909.

reasonably trustworthy, but such features are surprisingly few, in that the two sources show the widest discrepancy. Storm's method in predicating a considerable degree of historical reliability for the *Eiríks saga rauða* at the expense of the other is hardly to be justified. That this saga may be relatively better is not tantamount to its being reliable and the other worthless. Reeves' book represents essentially Storm's point of view on this matter, as it has generally been adopted by subsequent authors.

Since the publication of Fernald's paper a real contribution to the problem of the value of the sources has appeared in Nansen's book.[1] Nansen with the able assistance of his colleagues, Torp, Moe and others finds that the grapes and the self-sown wheat associated with Scandinavian records of the Norse discovery of America are an offshoot of common mediaeval legends of the "Islands of the Blest," which quite regularly, e. g. in Isidor, etc., were characterized by just these features.[2]

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[1] Nord i Tåkeheimen. Kristiania. 1911. The book has been accessible to me only in the English translation: In Northern Mists. New York. 1911. The essential points with reference to the Norse discovery of America may also be found in the Geographical Journal, xxxviii, 557 ff. 1911, being a lecture delivered by Nansen before the Royal Geographical Society, Nov. 6, 1911.

[2] Of interest is also the discovery brought out by the first partial publication of Nansen's results that similar results had been attained independently and earlier by a Swedish scholar, Söderberg. (Cf. In Northern Mists, ii, 62ff.). Nansen's brief estimate of Fernald's publication (ii, 5f.) is in entire accord with the considerations I have given expression to above.